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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,618	01/05/2001	Volker Zimmer	RDID004IUS	8239
32842	7590	02/26/2004	EXAMINER	
THE LAW OFFICE OF JILL L. WOODBURN, L.L.C. JILL L. WOODBURN 128 SHORE DR. OGDEN DUNES, IN 46368			IP, SIKYIN	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/555,618

**Applicant(s)**ZIMMER ET AL. **Examiner**

Sikyin Ip

**Art Unit**

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-14 and 16-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 3-14, 16-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/21/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 3-14 and 16-26 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4759805 to Saruwatari et al (PTO-1449, col. 1, lines 43-51), USP 3730783 to Streel (PTO-1449, col. 2, lines 31-50), USP 3255035 to Clough (PTO-1449, col. 3, example 1), or AN 115:237352 in view of McGannon (The Making, Shaping and Treating of Steel, United States Steel).

4. The Saruwatari et al, Streel, Clough, and AN 115:237352 reference(s) disclose(s) the features including the claimed steps of forming a metal layer then oxidize the layer with water/vapor/steam. The difference between the Saruwatari et al, Streel, Clough, and AN 115:237352 reference(s) and the claims are as follows:

said references do not set forth to increase the surface tension of an object by the oxide coating and the coating substrate is an analytical test element. However, McGannon in Figures 12-109 to 12-114 disclose(s) the surface tensions Vs. oxides in the same field of endeavor. Therefore, as is evinced by Figures and teachings of McGannon that ordinary skill artisan would recognize oxides formed by cited references would affect surface tensions of the objects. Thus, the use of oxide to change surface tension of an object is contemplated within ambit of ordinary skill artisan as is evinced by references of record.

5. With respect to the claimed “analytical test element” limitation that it fails to define structure and/or properties of the coating substrate. The “sample application site” and “determination site” have not been defined in the specification as originally filed. Thus, it reads on the coating substrates of the cited references at any site.

6. With respect to the instant claim 4, that cited references do not disclose the deposited layer is treated by superheated water vapour. But, it is well settled that the form of reactants (here boiling water, water vapor, steam, or superheated water) is believed mere a choice between well known forms of such substances. In the absence of evidence of some unobvious aspect of their selection, use of those substances would seem to add nothing of patentable significance to the instant claims. In re Austin, et al., 149 USPQ 685, 688.

7. Cited references except USP 4759805 (col. 3, lines 43-51) do not explicitly disclose the formed oxide coatings are more hydrophilic than the coating substrates. But, oxide coatings of cited references are formed by water/steam/vapor which evinces the formed oxide coatings are more hydrophilic/wettable than the coating substrates.
8. The claimed oxide layer is disclosed by AN 115:237352 in the abstract. Cited references appear silence about the deposited layer thickness. But, the instant specification does not have teaching to select the thickness (see page 13, first full paragraph of the instant specification). Thus, it is considered as non-critical or conventional.

*Response to Arguments*

9. Applicant's arguments filed November 21, 2003 have been fully considered but they are not persuasive.
10. Applicants' argument as set forth in page 6, second paragraph of the instant remarks is noted. But, the claimed analytical test element that is formed to transport liquid from site to site reads on the aluminum conductor as disclosed by Saruwatari (col. 1, lines 15-23, for example) which has a structure that holds water. The claimed "analytical test element" limitation fails to define structure and/or properties of the coating substrate. Thus, it reads on the coating substrates of the cited references.
11. Applicants' argument with respect to McGannon is noted. But, McGannon is

merely cited to show oxide layer/coating would inherently create tension on a substrate surface.

### *Conclusion*

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

### *Examiner Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241.

Serial No: 09/555,618  
Art Unit: 1742


-6-

The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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SIKYIN IP  
PRIMARY EXAMINER  
ART UNIT 1742

S. Ip  
February 23, 2004